

U.S. Patent Appln. S.N. 10/506,979  
AMENDMENT

PATENT

IN THE DRAWINGS:

Please replace the first sheet of drawings (Figs. 1 and 2)  
with the replacement sheet attached hereto.

REMARKS

This Amendment rewrites claims 9 and 10, corrects obvious typographical errors in the specification, and replaces the first sheet of drawings. In this regard, page 6, lines 2 and 3 of the specification have been corrected by changing  $P_{SR}$  to  $S_{RP}$ . One of ordinary skill would understand that the  $P_{SR}$  recited on page 6 is the same value (the safety ramp pressure) as  $S_{RP}$  in Fig. 4, particularly from the disclosure at page 5, line 30 to page 6, line 20. The correction of page 3, line 33 is supported by page 3, line 30. The ramp period feature of claim 9 is supported by page 1, lines 27-30, while the single ramp period pressure acceleration feature of claim 9 is supported by page 3, lines 8-10; page 4, lines 13-16 and Fig. 4. The amendment of claim 10 merely corrects a typographical error. Claims 9-17 are pending.

Examiner Patel is thanked for the courtesies extended to the undersigned during a personal interview held September 23, 2005. During the interview a proposed Amendment was presented to the Examiner, and the anticipation rejection was traversed using the arguments discussed below. At the conclusion of the interview, the Examiner indicated that this Amendment would overcome the anticipation rejection.

This Amendment overcomes the objection to the drawings. More particularly, a corrected Fig. 1 is attached in which reference 12 has been deleted from the Figure. Page 6, lines 2 and 3 of the specification have been corrected by changing  $P_{SR}$  to  $S_{RP}$ , thereby conforming page 6 to the flow chart of Fig. 4. The typographical error on page 3, line 33 has also been corrected. Reconsideration and withdrawal of the objection to the drawings are earnestly requested.

This Amendment overcomes the 35 U.S.C. § 102(b) rejection of claims 9-17 over U.S. Patent No. 5,970,975 to Estes et al. The claimed apparatus to assist a patient's respiration by delivering air to a patient through a mask includes a blower to provide the patient with air under a treatment pressure, a control unit to adjust the pressure delivered by the blower at the level of the mask, a ramp module connected to the control unit in order to provide the control unit with a value of pressure  $P_M$  to settle at said mask so that when said apparatus starts functioning, the pressure progressively rises until the pressure of treatment  $P_T$ , the rise of pressure until the pressure of treatment  $P_M$  corresponding to a ramp period; and, a comparator connected to the ramp module, at least one means for detecting the patient's

breathing parameters during said ramp period and sending them to said comparator such that the comparator is able during this said ramp period to determine whether an event ( $E_1$ ,  $E_2$  or  $E_3$ ) occurs in patient's breathing based on said breathing parameters and to send the corresponding data to the ramp module which provides the control unit with a value of pressure  $P_m$  that will speed up with respect of time during this said ramp period, so that the rise of pressure at patient's mask is accelerated within the same said ramp period. Thus, a feature of the claimed apparatus is that the pressure of air delivered to a patient can be accelerated during a single ramp period. This is graphically illustrated in Fig. 2, which shows the change in pressure rise which occurs when the patient falls asleep ( $E_1$ ), begins to snore ( $E_2$ ), and continues to snore ( $E_3$ ). The rise in air pressure is accelerated for each event within this same ramp period until the treatment pressure is achieved. See Example 1.

U.S. Patent No. 5,970,975 to Estes et al. fails to disclose the acceleration of air pressure within a single ramp period feature of the claimed apparatus. Instead, Estes et al. discloses a respirator whose ramp cycles are programmed into the respirator. Thus, the ramp of one ramp cycle cannot be modified during the same

ramp cycle. See col. 5, lines 1-11 and col. 19, lines 46-51. Adjustment of the ramp parameters is only possible prior to start of the ramp cycle. Although the Estes et al. respirator is able to provide different ramp cycles to adapt to events occurring during patient sleep, the parameters of these ramp cycles are derived from events which occurred in the previous ramp cycle.

The adjustment of the ramp cycle parameters is explained in detail at Col. 21, lines 27-52. Ramp cycle parameters are provided by ramp control circuitry means 104 and 104'. An additional ramp time setting control 127 is included within the apparatus, and is adjustable to provide parameters for a subsequent ramp cycle based of the event which occurred in the previous ramp cycle. Figure 7a shows a ramp pressure output pattern control 128 for establishing a predetermined pattern of pressure. In short, Estes et al. fails to disclose or suggest the modification of ramp cycle parameters during the same ramp cycle.

Reconsideration and withdrawal of the anticipation rejection of claims 9-17 are earnestly requested.

It is believed this Application is in condition for allowance. Reconsideration and withdrawal of the objection to the drawings and the rejection of claims 9-17, and issuance of a Notice of Allowance

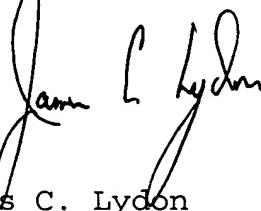
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directed to those claims, are earnestly requested. The Examiner is urged to telephone the undersigned should he believe any further action is required for allowance.

It is not believed that any fee is required for entry and consideration of this Amendment. Nevertheless, the Commissioner is authorized to charge our Deposit Account No. 50-1258 in the amount of any such required fee.

Respectfully submitted,

  
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Enclosure:  
Corrected Fig. 1